

THE OFFICE ACTION

In the Office Action issued on May 16, 2003, the Examiner confirmed that the elected claims being examined are claims 1-6, 8-20, 22, 23, and 25-30. The Examiner rejected claims 1, 2, 5-6, 8, 9, 12-16, 19, 20, 22, 23, 25 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,183,613 to Edwards (Edwards) in view of U.S. Patent No. 5,415,822 to Cook (Cook). The Examiner further rejected claims 3, 4, 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of U.S. Patent No. 3,646,155 to Scott et al. (Scott). The Examiner also rejected claims 10, 11, 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of U.S. Patent No. 6,099,676 to Hayashi (Hayashi).

INTERVIEW SUMMARY

In a telephonic interview on May 13, 2003, between Applicants' representative and Examiner Goff, the Examiner indicated that a further election between subspecies IIA and IIB and subspecies IIIA and IIIB was required. Applicants' representative elected subspecies IIB and IIIB, in addition to previously elected subspecies IA. It was agreed that these elections read on claims 1-6, 8-20, 22, 23 and 25-30. Applicants affirm that election without traverse.

REMARKS

Applicants have carefully considered the Office Action issued on May 16, 2003. Applicants respectfully request reconsideration of the application in light of the following comments.

A. The Pending Claims Are Not Obvious Over Edwards In View Of Cook

The Examiner rejected claims 1, 2, 5-6, 8, 9, 12-16, 19, 20, 22, 23, 25 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over Edwards in view of Cook. Applicants respectfully traverse.

Edwards is directed to a process for forming a glass run channel for use in automotive applications comprising the steps of contacting a melted polyolefin compound with an uncured elastomeric substrate and subsequently curing the elastomeric substrate to adhere the polyolefin compound to the elastomeric substrate. Edwards specifically teaches curing the elastomeric substrate after contacting it with the melted polyolefin compound (col. 5, lines 52-60, claim 1). Optional additives that may be added to the polyolefin include softening agents such as cured elastomers or thermoplastic elastomers, such as Santoprene® (col. 9, lines 47 to col. 10, lines 25).

Cook, on the other hand, is directed to the method of forming a composite extrusion wherein a main body portion is extruded from a thermosetting material, the main body portion is then cured and passed through a second extruder where a thermoplastic is extruded onto one or more surfaces of the main body portion. The thermoplastic material may be polyethylene, polypropylene or ethylene vinyl acetate. These materials can be modified with EPDM, butyl compounds, or other elastomers that may be cross-linked (col. 4, lines 29-34). As opposed to Edwards, the method of Cook teaches that the elastomer rubber is cured prior to its mating with the thermoplastic material. The proposed combination of Edwards and Cook fails to render the present claims obvious for at least the following reasons.

First, there is no motivation to combine the two references. To properly combine references under 35 U.S.C. §103, there must be some suggestion or motivation to modify or combine reference teachings (MPEP §2143.01). Here there is no motivation to combine the teachings of Cook and Edwards. In this respect, the Examiner states, "[O]ne of ordinary skill in the art at the time the invention was made would have readily appreciated using as the polyolefin taught by Edwards a crosslinkable polyolefin, i.e. a polyolefin crosslinked by means such as moisture, as it was well known in the art to use a crosslinkable polyolefin as the abrasion resistant layer as shown for example by Cook." Even assuming for the purposes of argument that this statement is true, it fails to provide proper motivation for combining the references. The mere fact that all of the elements of a claimed invention can be found

in a combination of prior art references is not sufficient to establish a *prima facie* case of obviousness. Rather, there must also be some motivation to combine the references. *In re Rouffet*, 47 USPQ 2d 1453 (Fed. Cir. 1998) (the combination of the references taught every element of the claimed invention. However, without a motivation to combine a rejection based on a *prima facie* case of obviousness was held improper.) Here, the Examiner has not provided any reasons why one skilled in the art would be motivated to combine the teachings of Cook and Edwards.

In addition, and as explained above, Cook relates to a method of forming a composite extrusion in which an elastomer rubber main body member is cured prior to mating with a thermoplastic layer, while Edwards discloses a process in which the elastomer rubber main body member is cured after coextruding with a thermoplastic layer. These two references are drawn to different processes to making composite extrusions. One skilled in the art practicing the invention of Edwards would not be motivated to use the teachings disclosed in Cook since Cook relates to a different process, and there is no indication that these teachings would be suitable for use therein.

Second, even if the references could somehow be combined, they would still not teach or disclose all of the elements of the claimed invention. In this respect, neither Cook nor Edwards alone, or in combination, discloses a crosslinkable thermoplastic abrasion resistant layer consisting essentially of polyolefin. As discussed above, Cook discloses that the thermoplastic materials which can be used are "polyethylene, polypropylene, or ethylene vinyl acetate. These can be modified with EPDM or butyl compounds and cross-lined [sic] by peroxides or moisture or UV and other systems." (col. 4, lines 30-34). Although the text of this passage is not entirely clear, Applicants submit that it is EPDM or butyl compound modifiers that may be crosslinked, and not the polyethylene, polypropylene or ethylene vinyl acetate. In support of this interpretation, Applicants point to the disclosure of Edwards which discloses that its polyolefin coating may be polypropylene, polyethylene or ethylene-propylene copolymer (col. 9, lines 11-13), which may include one or more softening

agents including cured (crosslinked) elastomers or thermoplastic elastomers, such as EPDM and Santoprene® (col. 9, lines 47 to col. 10, line 25). In Edwards, it is clear that only the softening agent additive is crosslinked, rather than the polyolefin itself. Applicants submit that the thermoplastic layers in both Edwards and Cook are identical or substantially identical. That is, Applicants submit that Cook discloses the thermoplastic layer including an uncrosslinked polyolefin that may be modified with cured elastomers or thermoplastic elastomer additives. Support for this construction can be found in column 6, lines 28-31 of Cook which discloses a thermoplastic including a blend of Santoprene® and polypropylene which is identical to the thermoplastic layer disclosed in Edwards in column 10, lines 1-25. Additional support for this interpretation is found in Cook itself, which discloses that the vulcanized or crosslinked thermosetting main body material may be polyethylene, polypropylene or ethylene vinyl acetate, which also can be modified with EPDM or butyl compounds and crosslinked (col. 4, lines 36-43). An interpretation that the Examiner is contending (i.e. that the polyolefin, itself, is crosslinked) would mean that there is nothing to distinguish the thermoplastic material from the thermosetting material in Cook. Obviously, these materials are different and this difference resides in the uncrosslinked nature of the polyolefin in the thermoplastic layer. Thus, because neither Cook nor Edwards discloses or suggests, either alone or in combination, a crosslinkable thermoplastic, although they do disclose a thermoplastic containing crosslinked modifiers, they fail to render the present claims obvious under 35 U.S.C. §103.

Even if the Examiner could somehow maintain his strained interpretation that Cook discloses a crosslinked polyolefin thermoplastic, then its proposed use in the method disclosed in Edwards would be impossible. That is, Edwards discloses that the polyolefin coating is substantially melted when adhered to the elastomer substrate (col. 8, lines 36-47). A crosslinked thermoplastic would not melt. That is, crosslinking provides molecular rigidity that prevents melting of a compound. Thus, assuming that the Examiner is correct in his statement that Cook discloses a crosslinked polyolefin thermoplastic, such a polyolefin would not be suitable for use in Edwards, which

requires that the polyolefin coating be substantially melted in his process. Thus, Edwards actually teaches away from the use of a crosslinked polyolefin. As the Examiner will note, it is improper to combine references where the references teach away from their combination. *In re Trasselli*, 218 USPQ 769 (Feb. Cir. 1983). For at least these reasons, Applicants submit that the combination of Cook and Edwards fails to render the present claims obvious.

Furthermore, and with respect to claim 8, even assuming the propriety of the proposed combination, such a combination fails to disclose or suggest contacting the elastomer rubber with the crosslinkable thermoplastic before the step of at least partially crosslinking the thermoplastic. With respect to claim 9, neither reference, either alone or in combination, discloses a process where the elastomer rubber and the crosslinkable thermoplastic are simultaneously extruded through a common extrusion die. As discussed above, Edwards discloses a process where the polyolefin coating is adhered to an elastomer rubber molding after the extrusion of the elastomer rubber. Similarly, Cook discloses a process where the elastomer rubber is extruded and cured prior to mating with the thermoplastic layer.

**B. The Present Claims Are Not Obvious Over Edwards and Cook
In View of Scott**

The Examiner rejected claims 3, 4, 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook in view of Scott. Applicants respectfully traverse.

The disclosures of Edwards and Cook are outlined above. Scott is directed to a method of crosslinking a polyolefin by grafting silane groups onto the polyolefin backbone and subsequently exposing the product to moisture. Applicants submit that the proposed combination fails to render the present claims unpatentable for at least the following reasons.

First, there is no motivation to combine the references. To properly combine references under 35 U.S.C. §103 there must be some suggestion or

motivation to combine the teachings of these separate references. In this respect, the lack of motivation for combining Edwards and Cook is outlined above. Further, there is no motivation to combine Scott with either Edwards or Cook since Scott teaches crosslinked polyolefins, whereas the polyolefin compositions in Edwards and Cook are not crosslinked. Thus, there would be no motivation to combine the method of crosslinking polyolefins as disclosed in Scott with either Edwards or Cook since neither discloses that the polyolefin in the thermoplastic layers are crosslinked. Rather, as described above, only the EPDM, Santoprene®, or other modifiers present in the thermoplastic are crosslinked.

Thus, Applicants submit that the proposed combination of Edwards and Cook, in view of Scott, fails to render the present claims unpatentable. Withdrawal of this rejection is respectfully requested.

**C. The Present Claims Patentable Over Edwards and Cook
In View of Hayashi**

The Examiner rejected claims 10, 11, 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of Hayashi. Applicants respectfully traverse.

The disclosures of Edwards and Cook are detailed above. Hayashi is directed to a method of making a glass run channel including the steps of bonding a tape member to an extruded rubber member. The tape member comprises polyethylene, polypropylene or a thermoplastic elastomer.

Despite the Examiner's arguments, there is no motivation to combine Edwards, Cook and Hayashi. The reasons why Edwards and Cook cannot be combined are detailed above. It is improper to combine Hayashi with either Edwards or Cook since the references disclose and teach completely different subject matter. That is, Edwards and Cook both teach the coextrusion of a thermoplastic onto a rubber member. Hayashi, on the other hand, discloses the lamination of a tape member onto a rubber main body member. There is no indication that the methods disclosed in either

Edwards or Cook could properly use a tape member as the abrasion resistant layer. This is particularly true with several of the embodiments described in Cook (such as those in Figure 2c), which would require multiple tape members to cover the varied surfaces of the composite extrusion. This is also the case with many of the embodiments disclosed in Edwards, which require multiple surfaces to be coated and would thus require multiple tape members, rollers, etc. as required by the method of Hayashi. The Examiner has provided absolutely no evidence that the teachings of Hayashi could be combined with Cook and/or Edwards. In fact, the references actually teach away from the use of a tape member. In this respect, Edwards specifically discloses that the polyolefin layer is substantially melted when it is contacted with the elastomeric substrate. Hayashi, on the other hand, discloses a solid tape member that only begins to melt when contacted with the hot based rubber member.

Even if the references could be combined, they would still have to disclose or suggest all of the elements of the present claims. In this respect, the proposed combination would still not disclose a crosslinkable thermoplastic consisting essentially of polyolefin. This is detailed above, which explains that both Cook and Edwards fail to disclose or teach a thermoplastic material wherein the polyolefin is crosslinked. Rather, only the elastomer or thermoplastic elastomer modifiers are crosslinked. For at least these reasons, the proposed combination of Edwards and Cook, in view of Hayashi, fails to render the present claims unpatentable.

CONCLUSION

In view of the foregoing comments, Applicants submit that claims 1-6, 8-20, 22, 23 and 25-30 are in condition for allowance. Applicants respectfully request early notification of such allowance. Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned to attempt to resolve any such issues.

If any fee is due in conjunction with the filing of this response, Applicants authorize deduction of that fee from Deposit Account 06-0308.

Respectfully submitted,

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Date: 03 July 2003


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